

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/803,352	FERNANDEZ ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Bernard E. Souw	2881	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 03/18/2004.
2. ☒ The allowed claim(s) is/are 1-30.
3. ☒ The drawings filed on 22 July 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date <u>04/26/2004</u> | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material                                 | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|  | 9. <input type="checkbox"/> Other _____.   |

## DETAILED ACTION

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this Examiner's Amendment has been given during a phone conversation with applicant's attorney, Ms. Shirley L. Church, Reg. No. 31,858, on March 04, 2005.

(a) **In the specification:**

► On page 1, line 5, after "[0001]", prior to "*The present application claims priority*", insert -- ***This application is a continuation of the US application SN 10/055,869, filed on 01/22/2002, now abandoned.*** --.

► On page 17, in lines 3-6, after "QE above 4%.", prior to "a regeneration cycle", delete *[Moreover, because the QE of the cesium telluride photocathode actually increases with power density, at least below a certain threshold, the photocathode can be regenerated using the laser itself. Thus]*, and insert -- ***While this is a QE-saturation effect, which is instant but temporary, and not necessarily or directly related to a QE-degradation due to contamination,*** --.

► On page 17, in line 17, after "*nanometers.*", prior to "*The substrate temperature*", insert **--*such that a QE recovery can be instantly monitored during the regeneration process.*--**

(b) **In the claims:**

► In claims 8, 19 and 25, after "*temperature*", at the end of the sentence, insert **--*for a time sufficient to regenerate said quantum efficiency of said photocathode.*--**

***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/18/2004 has been entered.

***Preliminary Amendment***

3. The Preliminary Amendment filed 03/18/2004 has been entered. The present Office Action is made with all the suggested amendments being fully considered.

The claims have been amended.

New claims 26-30 have been added.

Pending in this office action are claims 1-30

***Drawings***

4. A new set of formal figure drawings filed 07/22/2004 has been received and also entered, replacing the informal drawings filed 03/18/2004.

***Information Disclosure Statement***

5. The information disclosure statement (IDS) submitted on 04/26/2004 was filed after the mailing date of the application on 03/18/2004. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner, except one with wrong patent number (5,359,45?) issued to Gelbart et al. on 10/25/94.

***Examiner-Initiated Interview***

6. An Examiner-initiated telephone interview with Applicant's Attorney, Ms. Shirley L. Church, Reg. No. 31,858, has been conducted on 06/22/2004 and another one on 07/09/2004, to clarify the continuation status of the present application with regard to a previous application, SN 10/055,869, which has been abandoned on 06/29/2004. During the two telephone conversations a provisional amendment of the specification and the claims has been also agreed upon, but will be entered only after the continuation application has been received (see facsimile transmission dated 01/18/2005 showing records of the provisional amendment that has been agreed upon).

***ALLOWANCE***

7. Claims 1-30 are allowed.

***Reasons for Allowance***

8. The following is an examiner's statement of reasons for allowance:

An electron beam system or method employing a photocathode that generates photo-electrons upon irradiation by a laser operating in a first mode, wherein the photocathode is regenerated using the same laser in a second operating mode, as recited in claims 1, 5, 10, 13, 16 and 21, is neither anticipated nor rendered obvious by any prior art.

Claims 2-4, 6-9, 11, 12, 14, 15, 17-20 and 21-30 are also allowed because of their dependencies, either directly or indirectly, upon claims 1, 5, 10, 13, 16 or 21.

9. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Relevant Prior Art***

10. This prior art made of record and not relied upon is considered pertinent to applicant's disclosure: USPAT 6,724,002, issued on 04/20/2004 to Mankos et al., is found to disclose the same subject matter of the disclosure, and is claiming priority on the same provisional application 60/265,272, while having 4 (four) inventors in common.

However, USPAT 6,724,002 recites claims fully different than those of the present disclosure, and is therefore not qualified for Double Patenting rejection. Since the priority date of the present application (01/31/2001) is earlier than the filing date of the cited reference (01/22/2002) the latter does not qualify as a prior art under §102 or §103. Therefore, the present application is allowable in spite of the cited reference.

### ***Communications***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard E Souw whose telephone number is 571 272 2482. The examiner can normally be reached on Monday thru Friday, 9:00 am to 5:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R Lee can be reached on 571 272 2477. The central fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for regular communications as well as for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0956.

bes  
March 04, 2005

  
JOHN R. LEE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800